



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,666	06/21/2006	Garrett Pennington	GRM361US	3766
21302 7590 10/03/2008 KNOBLE, YOSHIDA & DUNLEAVY EIGHT PENN CENTER SUITE 1350, 1628 JOHN F KENNEDY BLVD PHILADELPHIA, PA 19103			EXAMINER MCNALLY, DANIEL	
			ART UNIT	PAPER NUMBER
			1791	
			MAIL DATE	DELIVERY MODE
			10/03/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/583,666

Applicant(s)

PENNINGTON, GARRETT

Examiner

DANIEL MCNALLY

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date 6/21/2006
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, 4, and 7-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Sarles et al. [US2002/0184860, herein "Sarles"], or alternatively rejected under 35 U.S.C. 102(a) and 102 (e) as being anticipated by Herzog [US6633480, herein "Herzog"].

Sarles discloses a method of bonding as broadly recited in claim 1. The method comprises providing a container (20) with an opening having a first bonding surface, providing a neck (21) with an opening having a second bonding surface, providing a foil seal (23) between the first and second bonding surfaces, induction sealing one of the bonding surfaces to the foil seal using a magnetic field generated by an induction sealing head (120), providing a field influencing object (126) near the foil to induce a portion of the magnetic field.

Herzog discloses a method of bonding a neck to a plastic container as broadly recited in claim 1. The method comprises providing a container (130) with an opening having a first bonding surface, providing a neck (136) with an opening having a second bonding surface, providing a foil seal (132) between the first and second bonding surfaces, induction sealing one of the bonding surfaces to the foil seal using a magnetic field generated by an induction sealing head (103), providing a field influencing object (120, 124) near the foil to induce a portion of the magnetic field.

With regard to claim 2, Sarles discloses a cooling device (122), and Herzog discloses a cooling device (column 4, lines 37-61).

With regard to claim 4, in both Sarles and Herzog it is inherent the container is filled with product before the foil seal is bonded because product could not be filled into the container once the packaging is sealed.

With regard to claims 7-9, Sarles discloses the field influencing object (126) is made of a ferrite core, which is a metal that is magnetizable and absorbs portion of the magnetic field. Herzog discloses the field influencing object (120) is made of a ferrite core, which is a metal that is magnetizable and absorbs portion of the magnetic field.

Sarles discloses an induction sealing head for bonding as broadly recited in claim 10. The apparatus comprising a magnetic field generator (wire coil 128) that is capable of generating a magnetic field that can be absorbed by a foil between two bonding surfaces, a field influencing object (126) that is located near a foil seal and is capable of influencing the magnetic field, and the field influencing object (126) is capable of preventing a portion of the magnetic field from heating the foil in a particular area.

Herzog discloses an induction sealing head for bonding as broadly recited in claim 10. The apparatus comprising a magnetic field generator (wire coil 108) that is capable of generating a magnetic field that can be absorbed by a foil between two bonding surfaces, a field influencing object (120, 124) that is located near a foil seal and is capable of influencing the magnetic field, and the field influencing object (120) is capable of preventing a portion of the magnetic field from heating the foil in a particular area.

With regard to claim 11, Sarles discloses a cooling device (122), and Herzog discloses a cooling device (column 4, lines 37-61).

With regard to claims 12-14, Sarles discloses the field influencing object (126) is made of a ferrite core, which is a metal that is magnetizable and absorbs portion of the magnetic field. Herzog discloses the field influencing object (120) is made of a ferrite core, which is a metal that is magnetizable and absorbs portion of the magnetic field.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5 and 7-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pollock et al. [US3815314, herein "Pollock"] in view of either one of Sarles or Herzog.

Pollock discloses a method and apparatus for induction sealing. The method comprises providing a container (25) with an opening having a first bonding surface, providing a neck (32) with an opening having a second bonding surface, providing a foil seal (10) between the first and second bonding surfaces, induction sealing one of the bonding surfaces to the foil seal using a magnetic field generated by an induction sealing head (40) (column 1, line 37- column 2, line 13; column 4, lines 10-60). Pollock is silent as to providing a field influencing object near the foil.

Sarles discloses a method of induction sealing. Applicant is referred to paragraph 2 for a detailed discussion of Sarles. Sarles discloses providing a field influencing object (126) with a cooling device near the foil to induce a portion of the magnetic field. Sarles discloses the sealing head comprising the field influencing object is more energy efficient, and is adapted to direct the magnetic field to the foil to seal the opening, and the cooling device prevents overheating.

Herzog discloses a method of induction sealing. Applicant is referred to paragraph 2 for a detailed discussion of Herzog. Herzog discloses providing a field influencing object (120) with a cooling device near the foil to induce a portion of the magnetic field. Herzog discloses the sealing head comprising the field influencing object is more energy efficient, and is adapted to direct the magnetic field to the foil to seal the opening, and the cooling device prevents overheating (column 1, line 60 – column 2, lines 16).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Pollock by using a induction heating head with a field

influencing object as taught by either one of Sarles or Herzog in order to make the sealing process more energy efficient.

With regard to claim 2, Sarles discloses a cooling device (122), and Herzog discloses a cooling device (column 4, lines 37-61).

With regard to claim 3, Pollock discloses the foil (10) is retained in the closure prior to the heat inducing step by an adhesive (column 1, lines 56-64).

With regard to claim 4, in Pollock it is inherent the container is filled with product before the foil seal is bonded because product could not be filled into the container once the packaging is sealed.

With regard to claim 5, Pollock discloses a cap is applied to the neck before the foil seal is bonded to the closure.

With regard to claims 7-9, Sarles discloses the field influencing object (126) is made of a ferrite core, which is a metal that is magnetizable and absorbs portion of the magnetic field. Herzog discloses the field influencing object (120) is made of a ferrite core, which is a metal that is magnetizable and absorbs portion of the magnetic field.

With regard to claims 10-14, Pollock is modified by using an induction heating head with a field influencing object as taught by either one of Sarles or Herzog, as discussed above. Applicant is referred to paragraph 2 for a detailed discussion of the induction heating apparatus of Sarles or Herzog.

5. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osip et al. [US5042226, herein "Osip"] in view of either one of Sarles or Herzog.

Osip discloses a method and apparatus for induction sealing. The method comprises providing a container (22) with an opening having a first bonding surface, providing a neck (31) with an opening having a second bonding surface, providing a foil seal (32) between the first and second bonding surfaces, induction sealing one of the bonding surfaces to the foil seal using a magnetic field generated by an induction coil (column 6, lines 1-23). Osip is silent as to the details about the induction sealing apparatus including a field influencing object.

Sarles discloses a method of induction sealing. Applicant is referred to paragraph 2 for a detailed discussion of Sarles. Sarles discloses providing a field influencing object (126) with a cooling device near the foil to induce a portion of the magnetic field. Sarles discloses the sealing head comprising the field influencing object is more energy efficient, and is adapted to direct the magnetic field to the foil to seal the opening, and the cooling device prevents overheating.

Herzog discloses a method of induction sealing. Applicant is referred to paragraph 2 for a detailed discussion of Herzog. Herzog discloses providing a field influencing object (120) with a cooling device near the foil to induce a portion of the magnetic field. Herzog discloses the sealing head comprising the field influencing object is more energy efficient, and is adapted to direct the magnetic field to the foil to seal the opening, and the cooling device prevents overheating (column 1, line 60 – column 2, lines 16).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Osip by using an induction heating head with a field

influencing object as taught by either one of Sarles or Herzog in order to make the sealing process more energy efficient.

With regard to claim 2, Sarles discloses a cooling device (122), and Herzog discloses a cooling device (column 4, lines 37-61).

With regard to claim 3, Osip discloses the foil (32) is retained in the neck (31) prior to the heat inducing step as shown in Figure 1.

With regard to claim 4, in Osip it is inherent the container is filled with product before the foil seal is bonded because product could not be filled into the container once the packaging is sealed.

With regard to claim 5, Osip discloses a cap (20) is applied to the neck before the foil seal is bonded to the closure.

With regard to claim 6, Osip discloses a pull ring (40) for tearing open the foil seal.

With regard to claims 7-9, Sarles discloses the field influencing object (126) is made of a ferrite core, which is a metal that is magnetizable and absorbs portion of the magnetic field. Herzog discloses the field influencing object (120) is made of a ferrite core, which is a metal that is magnetizable and absorbs portion of the magnetic field.

With regard to claims 10-14, Osip is modified by using an induction heating head with a field influencing object as taught by either one of Sarles or Herzog, as discussed above. Applicant is referred to paragraph 2 for a detailed discussion of the induction heating apparatus of Sarles or Herzog.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL MCNALLY whose telephone number is (571)272-2685. The examiner can normally be reached on Monday - Friday 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniel McNally/
Examiner, Art Unit 1791

/John L. Goff/
Primary Examiner, Art Unit 1791

/DPM/
September 26, 2008